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(54) Frequency translated filters for wideband applications

(57) Embodiments of a SAW-less RF receiver front-end (100) that includes a frequency translated notch filter (FTNF) are presented. An FTNF (400) includes a passive mixer (410) and a baseband impedance (420). The baseband impedance (420) includes capacitors (C_{BB1}-C_{BB4}) that form a low-Q band-stop filter. The passive mixer (410) is configured to translate the baseband impedance (420) to a higher frequency. The translated baseband impedance (420) forms a high-Q notch filter and is presented at the input of the FTNF (400). The FTNF can be fully integrated in CMOS IC technology (or others, e.g., Bipolar, BiCMOS, and SiGe) and applied in wireless receiver systems including EDGE/GSM, Wideband Code Division Multiple Access (WCDMA), Bluetooth, and wireless LANs (e.g., IEEE 802.11). In addition, embodiments of a generalized FTNF for wideband applications are presented.

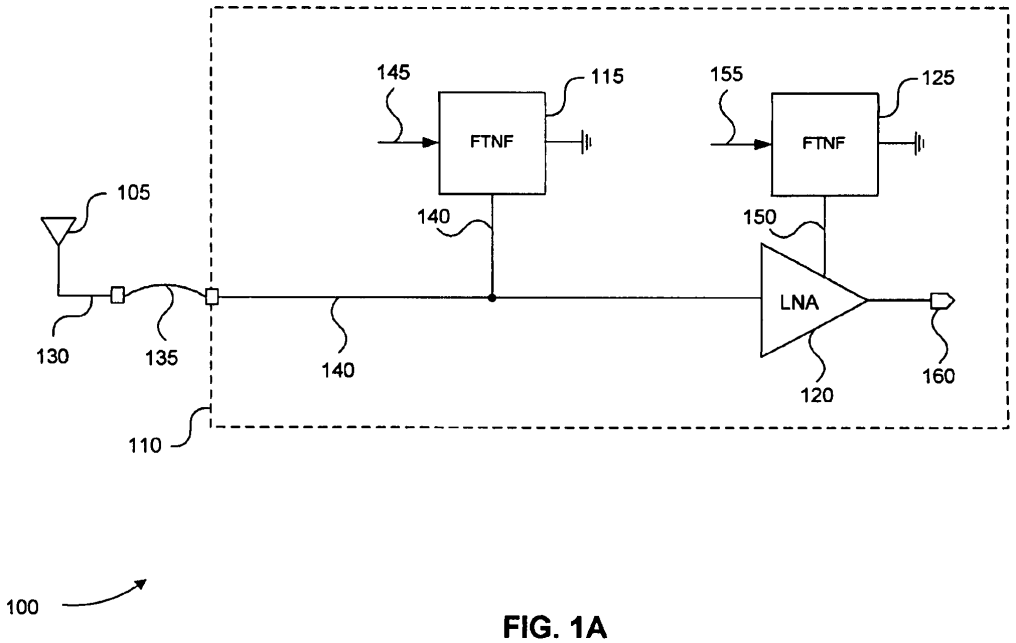

FIG. 1A

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EUROPEAN SEARCH REPORT

Application Number
EP 10 00 6766

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H03H
H04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	25 April 2016	Radomirescu, B-M

CATEGORY OF CITED DOCUMENTS

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